

THE SLIME-MOULDS OF PENNSYLVANIA

BY D. R. SUMSTINE

Of the 200 or more species of slime-moulds recognized in the United States, 103 or about one half have been reported from Pennsylvania. No doubt this number will be largely increased when the state is thoroughly explored.

The following list is necessarily incomplete but it provides a basis for future investigation of this interesting flora.

<i>Arcyria cinerea</i> (Bull.) Pers.*	<i>Craterium leucocephalum</i> (Pers.)
<i>denudata</i> (L.) Sheld.*	Ditm.†
<i>digitata</i> (Schw.) Rost.†	<i>Cribraria argillacea</i> Pers.†
<i>incarnata</i> Pers.*	<i>aurantiaca</i> Schrad.*
<i>incarnata nodulosa</i> Macbr.†	<i>dictydioides</i> Cke. & Balf.†
<i>magna</i> Rex ‡	<i>elegans</i> B. & C.†
<i>nutans</i> (Bull.) Grev.*	<i>intricata</i> (Schrad.) Rost.†
<i>Oerstedtii</i> Rost.†	<i>microcarpa</i> (Schrad.)
<i>Badhamia decipiens</i> (Curt.)	Pers.†
Berk.†	<i>minutissima</i> Schw.†
<i>lilacina</i> (Fr.) Rost.†	<i>purpurea</i> Schrad.†
<i>macrocarpa</i> (Ces.) Rost.†	<i>tenella</i> Schrad.†
<i>orbiculata</i> Rex ‡	<i>violacea</i> Rex
<i>papaveracea</i> B. & R.†	<i>Diachea leucopoda</i> (Bull.) Rost.*
<i>Brefeldia maxima</i> (Fr.) Rost.*	<i>splendens</i> Peck †
<i>Clastoderma Debaryanum</i>	<i>Dictydiaethalium plumbeum</i>
Blytt.†	(Schum.) List.*
<i>Comatricha aequalis</i> Peck †	<i>Dictydium cancellatum</i> (Batsch)
<i>longa</i> Peck †	Macbr.*
<i>nigra</i> (Pers.) Schroet.†	<i>Diderma cinereum</i> Morg.†
<i>Persoonii</i> Rost.†	<i>crustaceum</i> Peck*
<i>pulchella</i> (Bab.) Rost.†	<i>reticulatum</i> (Rost.)
<i>Craterium aurcum</i> (Schum.)	Morg.†
Rost.†	<i>stellare</i> (Schrad.) Pers.†

* Specimen in the writer's herbarium,

† Macbride, North American Slime Moulds.

‡ Proc. Acad. Nat. Sci. Philadelphia, 1893.

§ Proc. Acad. Nat. Sci. Philadelphia, 1891.

|| Proc. Acad. Nat. Sci. Philadelphia, 1889.

* Proc. Acad. Nat. Sci. Philadelphia, 1890.

- Didymium Clavus* (A. & S.)
 Rabenh. †
Enerthenema papillata (Pers.)
 Rost. †
Enteridium splendens Morg.*
Fuligo ovata (Schaeff.) Macbr.*
violacea Pers.*
Hemitrichia clavata (Pers.) Rost.*
intorta List.*
serpula (Scop.) Rost.*
stipitata Mass.*
vesparium (Batsch) Macbr.*
Lachnobolus globosus (Schw.)
 Rost.*
Lamproderma arcyrionema
 Rost. †
columbinum (Pers.) Rost. †
scintillans (B. & Br.) List. †
violaceum (Fr.) Rost. †
Leocarpus fragilis (Dicks.)
 Rost.*
Lepidoderma ligninum (Schrad.)
 Rost. †
Liccia minima Fr. †
variabilis Schrad. †
Lycogala conicum Pers.*
epidendrum (Buxb.) Fr.*
Mucilago spongiosa (Leyss.)
 Morg.*
Oligonema brevifila Peck †
Ophiotheca Wrightii B. & C. †
Orcadella operculata Wing. §
Perichacna marginata Schw. †
quadrata Macbr. †
Physarella oblonga (B. & C.)
 Morg. †
Physarum atrum Schw. †
Physarum caespitosum Schw. †
contextum Pers. †
ellipsosporum Rost.*
galbicum Wing. †
lateritium (B. & Br.) Rost. †
leucophacum Fr. †
leucopus Link *
nefroideum Rost. †
nucleatum Rex ||
obrusseum (Berk. & Curt.)
 Rost. †
penetrale Rex ||
psittacinum Ditm. †
pulcherrimum B. & R. †
rufipes A. & S. †
serpula Morg. †
virescens Ditm. †
Stemonitis fenestrata Rex †
fusca (Roth) Rost. †
maxima Schw.*
Morgani Peck *
nigrescens Rex ||
pallida Wing.*
Smithii Macbr.*
Webberi Rex *
Tilmadoche compacta Wing. §
viridis (Bull.) Sacc. †
Trichia botrytis Pers. †
decipiens (Pers.) Macbr.*
favoginea (Batsch) Pers.*
inconspicua Rost. †
persimilis Karst. †
scabra Rost.*
varia (Pers.) Rost.*
Tubifera ferruginosa (Batsch)
 Macbr.*

Specimens of the above species can be found in the Rex collection in the Academy of Natural Sciences, Philadelphia, in the Wingate collection now in the possession of Prof. Thomas H. Macbride, Iowa City, or in the writer's collection.

Dr. George A. Rex and Mr. Harold F. Wingate collected extensively in southeastern Pennsylvania, especially about Philadelphia. The writer has collected in Clarion, Armstrong and Westmoreland counties.

The nomenclature in Macbride's North American Slime-Moulds has been followed. Our thanks are due to Prof. C. H. Peck for identifying one species, *Dictydiaethalium plumbeum*.

KITTANNING, PA.

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THE CRATAEGI OF FORT FREDERICK, CROWN POINT, NEW YORK

BY W. W. EGGLESTON

Two miles across Bulwagga Bay from Port Henry are the ruins of Fort Frederick. Crown Point is a long tongue of clay underlaid with limestone; this is a typical place for the growth of Crataegi, lime appearing to be one of the essentials in the best development of the plant. The limestone soils of the Champlain and the St. Lawrence valleys show a wonderful development of the genus in numbers and variety and they follow so closely the limestone outcrops that one cannot help feeling that there are lime components in the soil wherever he finds Crataegi.

Our first attention was called to the thorns of Fort Frederick by F. H. Horsford in July, 1899. He had visited the Fort a few days before and although having but a few minutes to spare found six forms. This at a time when Vermont was known to have but five forms, was very surprising to us; now that we know nearly one hundred forms in Vermont we should not be so easily moved.

We have more than doubled Horsford's number and with more careful search will very likely find more. But the variety